# Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

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New purgewater trucks and filter skid

## **Overview**

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation, Groundwater/Vadose Zone.* 

NOTE: Unless otherwise noted, all information contained herein is as of the end of February 2008.

# **Notable Accomplishments**

#### · River Corridor

- Completed 300 Area shallow riverbed specific conductance study; relocating to 100 D Area.
- Awarded contract for the 100-KR-4 pump and treat system expansion.
- Completed the first round of vertical profiling sampling for the Horn chromium investigation.

#### · Central Plateau

- Received regulator approval for the 200-PO-1 Groundwater Remedial Investigation/Feasibility Study Work Plan.
- Accepted second of nine 200-BP-5 wells.
- Completed cleanup of purolite resin treatability test spill.
- Issued request for interest for national solicitation for ex-situ treatment of 200-ZP-1 groundwater.

#### Integration

- Completed the FY 2007 Hanford Site Groundwater Monitoring Report.
- Continuing well drilling across the site, with nine to ten drilling rigs operating at all times.
- Issued request for proposal for decommissioning contract for first 57 of 100 wells.
- Completed administrative decommissioning of approximately 2500 wells fiscal year to date.
- Completed 36 percent of baseline well sampling.
- Received new purgewater trucks and implemented filtration system for modutanks.

## **Issues**

High chromium contamination levels in five of the injection wells drilled for the 100-KR-4 pump and treat expansion contain chromium contamination levels in excess of the acceptable limit for injection wells. Locations are being evaluated for replacement wells. The overall expansion schedule is expected to be impacted by the requirement to drill new wells and to modify existing construction design drawings to reflect the revised injection well locations.

# FY 2008 Funds vs. Spend Forecast (\$M)

|  | Projected FY 2008<br>Funding |          | Variance |  |
|--|------------------------------|----------|----------|--|
| Soil and Water<br>Remediation, Groundwater/<br>Vadose Zone | \$ 115.3                     | \$ 111.8 | \$ 3.6   |  |

# Schedule/Cost Performance (\$M)

| Soil & Water<br>Remediation,<br>Groundwater/Vadose<br>Zone | Budgeted<br>Cost of<br>Work<br>Scheduled | Budgeted<br>Cost of<br>Work<br>Performed | Actual Cost<br>of Work<br>Performed | Schedule | Schedule<br>Variance % | Cost<br>Variance \$ | Cost<br>Variance % | Budget At<br>Completion<br>(FY08/<br>CTD) |
|--|--|--|-------------------------------------|----------|------------------------|---------------------|--------------------|---|
| Current Period (Month)                                     | \$8.8                                    | \$7.2                                    | \$7.3                               | -\$1.6   | -17.9%                 | -\$0.1              | -1.2%              | \$103.2                                   |
| Cumulative-to-Date<br>(FY 2004-Present)                    | \$246.4                                  | \$236.6                                  | \$236.0                             | -\$9.8   | -4.0%                  | \$0.6               | 0.3%               | \$311.8                                   |

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

#### CTD Schedule Performance (-\$9.8M/-4.0%):

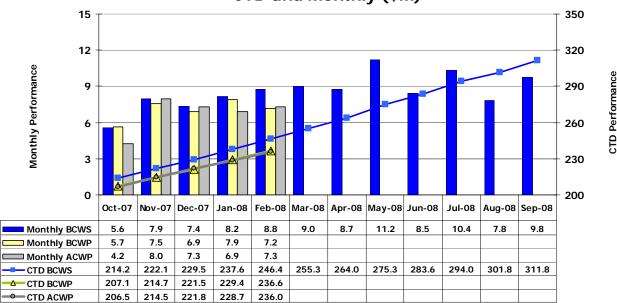
 The CTD schedule variance is primarily due to delayed start of construction for 100-KR-4 pump and treat expansion, due to the recent increase in the expansion scope; not yet recovered delays in well drilling due to cultural resource review and technical issues; delayed receipt of sample results; and delayed implementation of strategic integration changes.

### CTD Cost Performance (+\$0.6M/+0.3%):

 The CTD cost variance is attributable primarily to prior year estimating shortfalls associated with integrated field activities, which have been offset by more efficient operations in the groundwater pump and treat operations.

# Schedule/Cost Performance (\$M), continued





## **Milestone Achievement**

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

| Number    | Milestone Title  |     | Due Date | Actual<br>Date | Forecast<br>Date | Status/<br>Comments |
|-----------|--|-----|----------|----------------|------------------|---------------------|
| M-013-06B | Submit the 200-BP-5 OU RI/FS Work Plan to EPA  | TPA | 3/31/07  | 3/30/07        |                  | Complete            |
| M-016-14A | Complete Construction of a 300 foot Permeable Reactive Barrier Utililzing Apatite Sequestration at 100-N | TPA | 5/31/07  | 3/25/07        |                  | Complete            |
| M-015-48B | Submit the 200-ZP-1 OU Feasibliity Study Report / Proposed Plan to EPA                                   | TPA | 9/30/07  | 9/13/07        |                  | Complete            |
| M-013-10A | Submit the 200-PO-1 OU Remedial Investigation/Feasibility Study to Ecology                               | TPA | 9/30/07  | 8/22/07        |                  | Complete            |
| M-024-57M | Install a Cumulative of 60 Wells   | TPA | 12/31/07 | 4/6/07         |                  | Complete            |
| M-015-50  | Submit a Treatability Work Plan for Deep Vadose Zone Technetium and Uranium to Ecology and EPA           | TPA | 12/31/07 | 12/22/07       |                  | Complete            |
| M-016-14B | Submit Draft CERCLA Proposed Plan for 100-NR-2   | TPA | 8/31/08  |                | 8/31/08          | On Schedule         |